# **EXHIBIT 20**

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Page 1
                 UNITED STATES DISTRICT COURT
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 2
                NORTHERN DISTRICT OF CALIFORNIA
                    SAN FRANCISCO DIVISION
 3
 4
                                    )
 5
     IN RE GOOGLE PLAY STORE
     ANTITRUST LITIGATION
 6
     THIS DOCUMENT RELATES TO:
                                    )
                                       CASE NO.
 7
                                       3:21-MD-02981-JD
     STATE OF UTAH, ET AL. V.
                                    )
 8
     GOOGLE, LLC, ET AL.,
     CASE NO. 3:21-CV-05227-JD
 9
     MATCH GROUP, LLC ET AL. V.
10
     GOOGLE, LLC ET AL.,
     CASE NO. 3:22-CV-02746-JD
11
     EPIC GAMES, INC. V. GOOGLE,
12
     LLC ET AL.,
     CASE NO. 3:20-CV-05671-JD
13
     IN RE GOOGLE PLAY CONSUMER
     ANTITRUST LITIGATION,
14
     CASE NO. 3:20-CV-05761-JD
15
16
17
            ** PROVISIONALLY HIGHLY CONFIDENTIAL **
18
19
                         PROCEEDINGS OF
20
        VIDEOTAPED DEPOSITION OF STEVEN SCHWARTZ, PH.D.
21
                     TUESDAY, MARCH 28, 2023
22
23
24
     REPORTED BY: REAGAN EVANS, RPR, RMR, CRR, CCRR,
25
                   CLR, CRC, CA CSR NO. 8176
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1	VIDEOTAPED DEPOSITION OF STEVEN SCHWARTZ, PH.D.,
2	TAKEN ON BEHALF OF DEFENDANTS AT 9:07 A.M., TUESDAY,
3	MARCH 28, 2023, AT NEWPORT BEACH, CALIFORNIA, BEFORE
4	REAGAN EVANS, CA CSR NO. 8176, RPR, RMR, CRR, CCRR,
5	CLR, CRC.
6	
7	APPEARANCES OF COUNSEL
8	
9	FOR GOOGLE LLC ET AL.
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<ul><li>23</li><li>24</li></ul>	
25	

	Page 3
1	APPEARANCES OF COUNSEL (CONTINUED)
2	
3	FOR MATCH GROUP LLC; HUMOR RAINBOW, INC.; PLENTY OF
4	FISH MEDIA ULC; AND PEOPLE MEDIA, INC:
5	HUESTON HENNIGAN LLP
6	BY: MICHAEL M. PURPURA, ESQ.
7	620 NEWPORT CENTER DRIVE
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9	NEWPORT BEACH, CALIFORNIA 92660
10	(949) 229-8640
11	MPURPURA@HUESTON.COM
12	- AND -
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	Page 4
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	Page 5
1	APPEARANCES OF COUNSEL (CONTINUED)
2	
3	FOR INTERIM STEERING COMMITTEE MEMBERS FOR
4	PLAINTIFFS AND THE PROPOSED CLASS IN IN RE
5	GOOGLE PLAY CONSUMER ANTITRUST LITIGATION:
6	KOREIN TILLERY, LLC
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14	
15	
16	ALSO PRESENT:
17	JEANETTE TECKMAN, MATCH GROUP (REMOTELY)
18	STEPHEN MYERS, MATCH GROUP (REMOTELY)
19	DAVID WALCK, VIDEOGRAPHER
2 0	
21	
22	
23	
2 4	
25	

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5	PH.D.			
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7				
8		E	EXHIBITS	
9				
10	PREVIOUSLY MAR	RKED AN	ND ATTACHED:	
11	NO.	PAGE	DESCRIPTION	
12	EXHIBIT 360	149	PLAY VALUE MODEL,	PLAY BD
13			STRATOPS, AUGUST	3, 2019, BATES
14			STAMPED GOOG-PLAY	-000337564.R
15			THROUGH GOOG-PLAY	-000337631.R
16				
17				
18				
19	MARKED AND ATT	TACHED:	:	
20	NO.	PAGE	DESCRIPTION	
21	EXHIBIT 1106	25	EXPERT REPORT OF	STEVEN
22			SCHWARTZ, PH.D.,	DATED
23			OCTOBER 3, 2022,	1105 PAGES
24				

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5	MARKED AND ATT	ACHED:	
6	NO.	PAGE	DESCRIPTION
7	EXHIBIT 1107	25	REBUTTAL EXPERT REPORT OF
8			STEVEN SCHWARTZ, PH.D., DATED
9			NOVEMBER 18, 2022, 339 PAGES
10			
11	EXHIBIT 1108	25	REPLY EXPERT REPORT OF STEVEN
12			SCHWARTZ, PH.D., DATED
13			DECEMBER 23, 2022, 357 PAGES
14			
15	EXHIBIT 1109	38	COURT DECISION IN EPIC GAMES,
16			INC., V. APPLE INC.,
17			559 F.SUPP.3D 898, 154 PAGES
18			(2021)
19			
20	EXHIBIT 1110	111	TINDER PLAY VALUE ESTIMATE,
21			BATES STAMPED
22			GOOG-PLAY-011274244 THROUGH
23			GOOG-PLAY-011274253
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25			

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5	MARKED AND ATTACHED:
6	NO. PAGE DESCRIPTION
7	EXHIBIT 1111 123 EXCEL SPREADSHEET, BATES
8	STAMPED GOOG-PLAY-004625919
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1	NEWPORT BEACH, CALIFORNIA
2	TUESDAY, MARCH 28, 2023; 9:07 A.M.
3	
4	THE VIDEOGRAPHER: Good morning.
5	We are going on the record at 9:07 a.m., on
6	March 28th, 2023.
7	Please note that the microphones are
8	sensitive and may pick up whispering and private
9	conversations.
10	Please mute your phones at this time.
11	Audio and video recording will continue to
12	take place unless all parties agree to go off the
13	record.
14	This is Media Unit 1 of the video-recorded
15	deposition of Steven Schwartz, Ph.D., taken by
16	counsel for the defendants in the matter of In re
17	Google Play Store Antitrust Litigation, filed in the
18	United States District Court, Northern District of
19	California, San Francisco Division.
20	Case No. 3:21-md-02981-JD.
21	The location of this deposition is
22	620 Newport Center Drive, Suite 1300, in Newport
23	Beach, California.
24	My name is David Walck, and I am the
25	videographer.

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1	The court reporter is Reagan Evans. And we
2	are from the firm Veritext Legal Solutions.
3	I am not related to any party in this
4	action; nor am I financially interested in the
5	outcome.
6	Counsel, and everyone present, will now
7	state their appearances and their affiliations for
8	the record.
9	If there are any objections to proceeding,
10	please state them at the time of your appearance,
11	beginning with the noticing attorney.
12	MR. RAPHAEL: Good morning.
13	Justin Raphael, Munger Tolles & Olson, for
14	Google.
15	MR. PURPURA: Good morning.
16	Michael Purpura, Hueston Hennigan LLP, on
17	behalf of Match Group LLC, Humor Rainbow,
18	Incorporated, Plenty of Fish Media ULC, and People
19	Media, Inc., which we refer to as the Match
20	Plaintiffs.
21	MR. HARSHBARGER: Tate Harshbarger from
22	Hueston Hennigan LLP, also on behalf of the Match
23	Plaintiffs.
24	MR. BENEDICT: Brendan Benedict from the
25	Utah Office of the Attorney General on behalf of the

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1	plaintiff governments.
2	THE VIDEOGRAPHER: Would any of our remote
3	participants care to state their appearances on the
4	record today?
5	Hearing nothing, would the court reporter
6	please swear in the witness, and then Counsel may
7	proceed?
8	STEVEN SCHWARTZ, Ph.D.,
9	having been first duly sworn by the reporter,
10	was examined and testified as follows:
11	
12	THE WITNESS: I do.
13	THE REPORTER: Thank you.
14	
15	EXAMINATION
16	BY MR. RAPHAEL:
17	Q Good morning, Dr. Schwartz.
18	A Good morning.
19	Q Could you state your name for the record.
20	A Steven Schwartz.
21	Q And have you been deposed a number of
22	times, Dr. Schwartz?
23	A I have.
24	Q About how many times?
25	A Certainly north of 30. Whether it's north

	Page 44
1	some billing, and some other services?
2	MR. PURPURA: Objection. Form.
3	THE WITNESS: Well, there's something in
4	your question that I I I don't agree with. I
5	don't agree that the payment processing services are
6	the same as the Play Store services. Obviously, as
7	I've said in my report, I think there is a separate
8	demand. They are distinct services. It is one fee
9	for the bundle of services between Google Play
10	billing and the Google Play Store that I view as
11	separate and distinct.
12	BY MR. RAPHAEL:
13	Q Okay.
14	So the service fees that the Match
15	Plaintiffs pay are for a bundle of services from the
16	Google Play Store, as well as billing services?
17	MR. PURPURA: Objection. Form.
18	THE WITNESS: I would not disagree with
19	that.
20	BY MR. RAPHAEL:
21	Q Okay.
22	Now, I think you mentioned that Google,
23	where it has enabled developers to pay strike
24	that.
25	Where Google has enabled developers to use

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1	services are provided by the Google Play Store and
2	those associated with Google Play billing.
3	The price is facially supracompetitive.
4	There is also injury to Match Plaintiffs as
5	a result of the reduction in choices and options it
6	has for the distribution of apps to the universe of
7	Android device owners who might be interested in
8	securing their apps.
9	Principally, I would say the injury flows
10	from the bundle supracompetitive price and the
11	reduction of choice and options available to it for
12	distribution.
13	BY MR. RAPHAEL:
14	Q Okay.
15	So let me try to break that down.
16	A Okay.
17	Q So I think the first thing you were saying
18	is that the Match Plaintiffs are harmed by a
19	reduction in competition for app distribution
20	because the service fees they pay are a
21	supracompetitive price, in part, for app
22	distribution?
23	A Correct.
24	Q Okay.
25	Now, I think you also then said that the

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1	Are you offering any opinion that any OEM
2	actually would have done that in the but-for world?
3	A I am not offering that opinion with respect
4	to any specific OEM.
5	Q Is it anticompetitive for Google not to
6	make all of its APIs open source?
7	MR. PURPURA: Objection.
8	THE WITNESS: That's not a question I've
9	analyzed.
10	BY MR. RAPHAEL:
11	Q So you have no opinion on that issue that
12	you've disclosed in your reports?
13	A I don't believe I do.
14	Q Have you done any analysis in your reports
15	of whether Google operated Play below cost as a
16	result of making certain payments of revenue share
17	to carriers?
18	A Say that again, please.
19	Q Have you done any analysis in your report
20	of whether Google operated Play below cost as a
21	result of sharing revenue with cellular carriers?
22	A I have not.
23	Q Have you seen any evidence that Google
24	promised that it would never reduce carriers'
25	revenue share?

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1	A I don't recall seeing evidence on that one
2	way or the other.
3	Q Have you ever seen any evidence that Google
4	promised that it would never earn a profit from its
5	app store?
6	A I have not seen any evidence that speaks to
7	that.
8	Q Why did carrier app stores fail?
9	MR. PURPURA: Objection.
10	BY MR. RAPHAEL:
11	Q Well, let me back up and lay some
12	foundation there.
13	Are you aware that some cellular carriers
14	actually did launch their own app stores?
15	A I'm vaguely aware of it, but it's not a
16	subject that I've studied.
17	Q So you haven't studied why those app stores
18	that cellular carriers launched weren't more
19	successful than they were in the actual world?
20	A I have not.
21	Q Do any of Google's revenue sharing
22	agreements with carriers prohibit the carriers from
23	either launching their own app store or
24	preinstalling an app store other than Google Play?
25	A I would have to look back at the agreement